

CLAIMS

1. A composite tool bar having a composite body part covered with a covering, with a plurality of bites mounted on the composite body part along a longitudinal direction, the composite tool bar comprising:

5 a first insert inserted into the composite body part while passing through the composite body part, with a bite mounting hole provided in the first insert to receive a bite therein, and a bite height adjusting hole axially aligned with the bite mounting hole in the first insert to receive therein a bite height adjusting bolt for adjusting a height of the bite inserted into the bite mounting hole; and

10 a second insert inserted into the composite body part to be coupled to a first side of the first insert, with a bite holding hole provided in the second insert to receive therein a bite holding bolt.

2. The composite tool bar according to claim 1, wherein the first insert is fitted into and fastened to an insert hole, formed through both the composite body part and the covering, using a bonding agent or through an interference fitting process.

15 3. The composite tool bar according to claim 1, wherein the first insert is tapped on an outer surface thereof, and an insert hole formed through both the composite body part and the covering is tapped on an inner surface thereof to correspond to the tapped first insert, so that the first insert is tightened into the insert hole.

20 4. The composite tool bar according to claim 3, further comprising:
a bonding agent applied to the outer surface of the first insert or the inner surface of the insert hole.

5. The composite tool bar according to claim 1 or 3, further comprising:
an additional insert inserted into a predetermined position of the composite body
25 part to be diametrically opposite to the second insert based on a longitudinal axis of the

composite body part.

6. The composite tool bar according to claim 1 or 3, wherein the second insert extends to a second side of the first insert to perpendicularly cross to the first insert at a longitudinal axis of the composite body part.

5 7. The composite tool bar according to any one of claims 1 through 3, wherein the covering covers ends of both the first insert and the second insert, thus preventing the ends of the inserts from being exposed outside.

10 8. A composite tool bar having a composite body part covered with a covering, with a plurality of bites mounted on the composite body part along a longitudinal direction, the composite tool bar comprising:

 a first insert inserted into the composite body part, with a bite mounting hole provided in the first insert to receive a bite therein, the first insert having at a first end thereof a predetermined diameter wider than an average diameter thereof like a shape of a screw and being tapped on an outer surface of a second end thereof;

15 a second insert coupled to a predetermined side of the first insert, with a bite holding hole provided in the second insert to receive therein a bite holding bolt; and

 a third insert, with a bite height adjusting hole provided in the third insert to receive therein a bite height adjusting bolt for adjusting a height of the bite inserted into the bite mounting hole, the third insert having, at a first end thereof, a predetermined diameter wider than an average diameter thereof like a shape of a screw and being tapped at a second end thereof to engage with the second end of the first insert, thus being inserted into the composite body part to be axially aligned with the first insert in a direction opposite to the first insert.

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25 9. The composite tool bar according to claim 8, wherein the covering covers ends of the first, second and third inserts, thus preventing the ends of the inserts from being exposed outside.

10. The composite tool bar according to claim 1 or 8, wherein the covering has a predetermined outer diameter in a bite mounting region thereof, on which both the bite height adjusting hole and the bite holding hole are formed, smaller than an outer diameter in another region thereof, which has no hole, thus preventing the covering from being processed in a post-process.
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